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Plantar Fasciitis

Attention: All Doctors in all Locations

This article applies to both State Fund and Self Insured Claims

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We recognize that identifying a specific cause for a particular condition can, at times, be very difficult. The purpose of this article is to give providers additional information about the possible causal relationship between workplace injuries or exposures and the development of plantar fasciitis.

Nothing in this article should be construed as an interpretation of the Department of Labor and Industries' Medical Aid Rules or department policies, nor as an instruction as to how those rules and policies are applied. These issues and others – such as whether a claim should be allowed for this condition or re-opened – are claims adjudication issues, and are beyond the scope of this educational update.

Definition:

Plantar fasciitis is an inflammation of the plantar fascial attachment to the anterior processes of the heel bone. The term "heel spurs" has been used in the past; however, such spurs may or may not be present in plantar fasciitis. It is a common condition that has been reported to occur in over one-half of humans at some time during their life. It is usually a self-limiting condition lasting several months and is subject to re-occurrence.

Anatomy:

The plantar fascia is a broad, fibrous tissue or ligament that extends from the heel bone (calcaneous) to the toes (metatarsals). The purpose of the plantar fascia is to support the arch and stabilize it during normal weight bearing.

An over-stretching of the plantar fascia can cause microscopic tears and inflammation at or near the calcaneous. When walking, the calcaneous acts like a lever in the transfer of force from the Achilles tendon to the forefoot, making the attachment site of the plantar fascia a frequent source of stress/inflammation.

Symptoms:

Plantar fasciitis often presents as a dull, deep, ache-like pain in the plantar surface of the heel. Other common symptoms include:

- Burning sensations;
- Pain in the morning when one first gets out of bed;
- Pain and stiffness when one starts to walk after sitting;
- Increasing pain in the heel or arch towards the end of the day;
- Tired feet at the end of the day.

Causes:

Cause of plantar fasciitis may include:

- Infection
- Arthritis (gout)
- Systemic disorders
- Nerve entrapment
- Deconditioning
- A sudden increase in physical activity (gardening, golf, exercise)
- Excess weight or a recent weight gain (pregnancy)
- Poor biomechanics (flat feet, high arches or unnatural gait)
- Failure of a previous surgery
- Athletics or trauma to the area

Work relatedness:

Plantar fasciitis *may* be a work-related condition in the following circumstances:

- 1. Acute onset following direct trauma to the heel.
- 2. Acute strain to the plantar fascia such as in jumping from high objects or falls (i.e. landing on the rung of a ladder).
- 3. Acute onset following high stress such as running long distances or unusual rapid walking as in a "forced march".

Non-work related:

Medically, plantar fasciitis is *unlikely* to be a work-related condition/occupational disease when caused by following circumstances:

- 1. Specific walking surfaces (cement floors).
- 2. Long periods of standing or walking.
- 3. Shoe wear.
- 4. Repetitive foot motion.

There is no acceptable documentation in peer-reviewed literature that any of these four conditions play a role in the onset of plantar fasciitis.

Treatment:

Treatment of plantar fasciitis includes:

- Orthotics (pads)
- Heel cord stretching exercises
- Anti-inflammatory medication
- Activity modification
- Night splinting
- Steroid injection to the site
- Surgery

Surgical treatment is usually reserved for cases not responsive to the more conservative treatments listed above. Arthroscopic release of the plantar fascia at this time is considered a developmental procedure.

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